

Title (en)

Transmission power control device and method, mobile station, and communication device in mobile communication system

Title (de)

Steuervorrichtung und Verfahren für die Übertragungsleistung, mobile Station und Kommunikationsvorrichtung in einem mobilen Kommunikationssystem

Title (fr)

Dispositif de contrôle de la puissance de transmission, station mobile, et dispositif de communication dans un système de communication mobile

Publication

**EP 2136595 B1 20180704 (EN)**

Application

**EP 09171873 A 20020723**

Priority

- EP 02749349 A 20020723
- JP 2001223652 A 20010724
- JP 2001233872 A 20010801
- JP 2001245100 A 20010810

Abstract (en)

[origin: US2004005906A1] A transmission power control device is provided that includes: a transmission loss calculator that calculates a transmission loss in the electric wave transmission path between a mobile station and each base station; and a transmission power control information determiner that determines which transmission power control information is to be used in a transmission power control operation at the mobile station, based on transmission power control information transmitted from each base station to the mobile station and the transmission loss in the transmission path between the mobile station and each base station calculated by the transmission loss calculator. This transmission power control device may further include an autonomous controller that increases transmission power from a current value in accordance with predetermined characteristics, regardless of transmission power control information from another communication device, when reception signal quality has become lower than a predetermined quality level. With this structure, after synchronization with a signal from the base station is established at the mobile station, the transmission power is controlled to increase from the initial value in accordance with the predetermined characteristics, regardless of the transmission power control information transmitted from the base station.

IPC 8 full level

**H04B 7/005** (2006.01); **H04W 52/04** (2009.01); **H04W 52/08** (2009.01); **H04W 52/10** (2009.01); **H04W 52/12** (2009.01); **H04W 52/24** (2009.01); **H04W 52/40** (2009.01); **H04W 52/50** (2009.01)

CPC (source: EP KR US)

**H04B 7/005** (2013.01 - KR); **H04B 7/2628** (2013.01 - KR); **H04L 1/004** (2013.01 - KR); **H04W 52/08** (2013.01 - KR); **H04W 52/10** (2013.01 - KR); **H04W 52/12** (2013.01 - KR); **H04W 52/241** (2013.01 - EP KR US); **H04W 52/40** (2013.01 - EP KR US); **H04W 52/50** (2013.01 - EP KR US); **H04W 52/08** (2013.01 - EP US); **H04W 52/10** (2013.01 - EP US); **H04W 52/12** (2013.01 - EP US)

Cited by

US10959120B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**US 2004005906 A1 20040108**; **US 7277721 B2 20071002**; AU 2002320680 B2 20050317; AU 2002320680 B9 20050804; CA 2423261 A1 20030320; CA 2423261 C 20091006; CN 100435494 C 20081119; CN 100468986 C 20090311; CN 100481751 C 20090422; CN 100571058 C 20091216; CN 1225094 C 20051026; CN 1465147 A 20031231; CN 1684385 A 20051019; CN 1684386 A 20051019; CN 1684387 A 20051019; CN 1684388 A 20051019; EP 1411650 A1 20040421; EP 1411650 A4 20080820; EP 1411650 B1 20141126; EP 2134130 A2 20091216; EP 2134130 A3 20121003; EP 2134130 B1 20170222; EP 2136595 A2 20091223; EP 2136595 A3 20121003; EP 2136595 B1 20180704; JP 4113840 B2 20080709; JP WO2003010903 A1 20041118; KR 100619223 B1 20060907; KR 100737775 B1 20070711; KR 100749900 B1 20070821; KR 20030042475 A 20030528; KR 20060007461 A 20060124; KR 20060090737 A 20060814; US 2007129096 A1 20070607; US 7643845 B2 20100105; WO 03010903 A1 20030206

DOCDB simple family (application)

**US 38076803 A 20030324**; AU 2002320680 A 20020723; CA 2423261 A 20020723; CN 02802471 A 20020723; CN 200510071931 A 20020723; CN 200510071932 A 20020723; CN 200510071933 A 20020723; CN 200510071934 A 20020723; EP 02749349 A 20020723; EP 09171870 A 20020723; EP 09171873 A 20020723; JP 0207453 W 20020723; JP 2003516165 A 20020723; KR 20037005656 A 20030423; KR 20067000195 A 20060103; KR 20067015443 A 20060728; US 67427607 A 20070213